

Name _____ Date _____

Study Guide

Writing Expressions and Equations

The table shows phrases written as mathematical expressions.

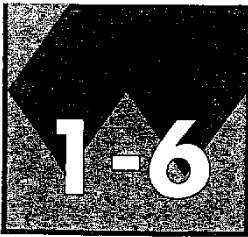
Phrase	Expression	Phrase	Expression
8 more than a number the sum of 8 and a number x plus 8 x increased by 8	$x + 8$	7 subtracted from a number h minus 7 7 less than a number a number decreased by 7	$h - 7$
Phrase	Expression	Phrase	Expression
3 multiplied by n 3 times a number the product of n and 3	$3n$	a number divided by 5 the quotient of t divided by 5 divide a number by 5	$\frac{t}{5}$

Write each phrase as an algebraic expression.

- 12 more than a number
- the quotient of a number divided by 9
- 4 times a number
- 15 less than a number
- 1 less than the product of 3 and m
- the product of 4 times a number minus 8

Write each sentence as an algebraic equation.

- A number minus 6 equals 12.
- A number plus 14 equals 25.
- 3 more than 5 times the number of dogs is 18 dogs.
- 4 times the number of cows plus 2 times the number of ducks is 20.
- 2 less than the quotient of 12 divided by a number is 2.
- The product of 5 and y added to 3 is 33.



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Practice

Writing Expressions and Equations

Write each phrase or sentence as an algebraic expression or equation.

1. 8 more than x
2. 12 less than b
3. the product of 6 and y
4. the quotient of a and 4
5. the sum of 9 and c
6. the difference of q and 12
7. 7 times d
8. 20 less n
9. 6 less than x is 18.
10. 4 more than y is 17.
11. The product of a and 7 is 21.
12. The sum of 1 and w is 12.
13. the sum of 8 and 6 times y
14. eight dollars less than Joni earned
15. Pak's salary minus a \$223 deduction
16. twice as many flowers as Susan picked
17. 6 less than the product of 8 and c is 58.
18. The cost of the tea plus 10 cents tax is \$2.09.
19. 8 more than the number of meals served on Tuesday
20. 18 less than the number of gameboard squares is 126.
21. 63 is 1 more than twice the number of miles Timothy drove.
22. The sum of 9 and the quotient of x and 7 is 11.
23. 12 less than twice the number of cows is 36.
24. 17 inches less than 3 times Maria's height is 169 inches.
25. 5 more than the number of paper clips divided into 4 groups
26. 18 more than 3 times Tony's wages
27. 8 less than the number of apples divided into 5 groups is 32.